

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

CORRECTED VERSION

Applicant's or agent's file reference 43855/X430/32AJC	<b>FOR FURTHER ACTION</b>		See Form PCT/IPEA/416
International application No. PCT/NZ2006/000133	International filing date (day/month/year) 26 May 2006	Priority date (day/month/year) 26 May 2005	
International Patent Classification (IPC) or national classification and IPC			
Int. Cl.	A63B 69/00 (2006.01) A63C 5/16 (2006.01)	G09B 9/02 (2006.01) G09B 19/16 (2006.01)	
Applicant DUBAR, Graeme Andrew et al			

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a. ☒ (sent to the applicant and to the International Bureau) a total of 13 sheets, as follows:

☒ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or table related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

☒ Box No. I Basis of the report

☐ Box No. II Priority

☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

☒ Box No. IV Lack of unity of invention

☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

☐ Box No. VI Certain documents cited

☐ Box No. VII Certain defects in the international application

☐ Box No. VIII Certain observations on the international application

Date of submission of the demand 26 March 2007	Date of completion of this report 29 October 2007
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustalia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer <b>ROGER SMALL</b> AUSTRALIAN PATENT OFFICE (ISO 9001 Quality Certified Service) Telephone No. (02) 6283 7998

Box No *	Basis of the report
1.	<p>With regard to the language, this report is based on:</p> <p><input checked="" type="checkbox"/> The international application in the language in which it was filed</p> <p><input type="checkbox"/> A translation of the international application into _____, which is the language of a translation furnished for the purposes of:</p> <p><input type="checkbox"/> international search (under Rules 12.3(a) and 23.1 (b))</p> <p><input type="checkbox"/> publication of the international application (under Rule 12.4(a))</p> <p><input type="checkbox"/> international preliminary examination (Rules 55.2(a) and/or 55.3(a))</p>
2.	<p>With regard to the elements of the international application, this report is based on (<i>replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report</i>):</p> <p><input type="checkbox"/> the international application as originally filed/furnished</p> <p><input checked="" type="checkbox"/> the description:</p> <p>pages 1-3, 6-20, 22, 25-27 as originally filed/furnished</p> <p>pages* 4-5, 21, 23-24 received by this Authority on 3 September 2007 with the letter dated 3 September 2007</p> <p><input checked="" type="checkbox"/> the claims:</p> <p>pages 30-32, 34, 37-39 as originally filed/furnished</p> <p>pages* as amended (together with any statement) under Article 19</p> <p>pages* 28-29, 33, 35-36, 40-41 received by this Authority on 3 September 2007 with the letter dated 3 September 2007</p> <p><input checked="" type="checkbox"/> the drawings:</p> <p>pages 2/11 to 11/11 as originally filed/furnished</p> <p>pages* 1/11 received by this Authority on 3 September 2007 with the letter of 3 September 2007</p> <p>pages* received by this Authority on with the letter of</p> <p><input type="checkbox"/> a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.</p>
3.	<p>The amendments have resulted in the cancellation of:</p> <p><input type="checkbox"/> the description, pages</p> <p><input type="checkbox"/> the claims, Nos.</p> <p><input type="checkbox"/> the drawings, sheets/figs</p> <p><input type="checkbox"/> the sequence listing (<i>specify</i>):</p> <p><input type="checkbox"/> any table(s) related to the sequence listing (<i>specify</i>):</p>
4.	<p><input type="checkbox"/> This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).</p> <p><input type="checkbox"/> the description, pages</p> <p><input type="checkbox"/> the claims, Nos.</p> <p><input type="checkbox"/> the drawings, sheets/figs</p> <p><input type="checkbox"/> the sequence listing (<i>specify</i>):</p> <p><input type="checkbox"/> any table(s) related to the sequence listing (<i>specify</i>):</p>
5.	<p><input type="checkbox"/> This report has been established taking into account the rectification of an obvious mistake authorized by or notified to the Authority under Rule 91 (Rule 70.2(e)).</p>

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## Box No. Lack of unity of invention

1. ☐ In response to the invitation to restrict or pay additional fees the applicant has, within the applicable time limit:
- ☐ restricted the claims
  - ☐ paid additional fees
  - ☐ paid additional fees under protest and, where applicable, the protest fee
  - ☐ paid additional fees under protest but the applicable protest fee was not paid
  - ☐ neither restricted the claims nor paid additional fees
2. ☒ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is:
- ☐ complied with.
  - ☒ not complied with for the following reasons:

In assessing whether there is more than one invention claimed, I have given consideration to those features which can be considered to potentially distinguish the claimed combination of features from the prior art. Where different claims have different distinguishing features they define different inventions. This International Searching Authority has found that there are different inventions as follows:

- Claims 1-69 (and 71-73) to are directed to an activity board characterised in that the board is rotatable with respect to the base portion about a first axis (orthogonal with upper surface of board); a second axis (orthogonal to the first axis and substantially parallel to upper surface of the board); a third axis (orthogonal to both the first and second axis); and a fourth axis parallel to the second axis. It is considered that a board being rotatable with respect to the base portion about a fourth axis parallel to the second axis comprises a first distinguishing feature.
- Claim 70 (and 71-73) are directed to an activity board characterised in that the board is rotatable with respect to the base portion about a first axis (orthogonal with upper surface of board); a second axis (orthogonal to the first axis and substantially parallel to upper surface of the board); a third axis (orthogonal to both the first and second axis); and wherein the board is provided with a yaw-rate restrictor for restricting rotation about the first axis. It is considered that a yaw-rate restrictor comprises a second distinguishing feature.

*[Continued in Supplemental Box II]*

4. Consequently, this report has been established in respect of the following parts of the international application:
- ☒ all parts.
  - ☐ the parts relating to claims Nos.

Box No	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
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## 1. Statement

Novelty (N)	Claims 1-73	YES
	Claims None	NO
Inventive step (IS)	Claims 1-73	YES
	Claims None	NO
Industrial applicability (IA)	Claims 1-73	YES
	Claims None	NO

## 2. Citations and explanations (Rule 70.7)

The following documents identified in the International Search Report have been considered for the purposes of this report:

D1: US 2003/0017922 (SACHS)  
D2: US 5062629 (VAUGHAN)  
D3: CA 2209030 (CURTIS et al.)  
D4: KR 2002078447 (KO)

D5: US 6413197 (McKECHNIE et al.)  
D6: US 4966364 (EGGENBERGER)  
D7: US 2004/0138028 (HSIEH)

The invention defined in the present application relates to an activity board and more particularly to an activity board for the simulation of board sports such as skateboarding, snowboarding, snowboarding, surfing and the like.

Novelty (N) – first inventive concept, claims 1 to 69 and 71 to 73

The invention as defined in its broadest form includes: a board having an upper surface for supporting a user; a base portion; and a resilient support member having an upper and a lower distal end, the upper end being connected to an underside of the board and the lower distal end being connected to the base portion. The board is characterised in that it is rotatable with respect to the base portion about three defined axes (i.e. the principal rotations) and a fourth axis parallel to the second axis. The board is further characterised in that it is rotatable through 360° about the first axis via a rotatable connection between the resilient support member and the board.

Further embodiments define alternate configurations of the above board with respect to the configuration and permitted movement of the base portion.

Of the prior art documents obtained (see D1 to D7 which are directed towards activity boards for the simulation of board sports) the most pertinent state of the art is represented by the recreational balancing apparatus of D1. From this board assembly, the one defined by independent claims 1, 31, 43 and 46 differs in that the board is rotatable with respect to the base portion about a fourth axis parallel to the second axis.

The rotational relationship (bending moment) provided by rotation about a fourth axis (parallel to the second) and the base creates an arc approximately centred at the connection between the base portion and the lower end of the support member. This bending moment thus provides an additional component of rotational movement about the second or third axes (i.e. roll and/or pitch).

It is therefore considered that the subject matter of claims 1, 31, 43 and 46 is new and meets the requirements of Article 33(2) of the PCT with regard to novelty.

*[Continued in Supplemental Box II]*

## Supplemental Box I

In the space in any of the preceding boxes is not sufficient.

Continuation of: Box No. V

The additional features of claims 2-30, 32-42, 44-45, 47-69 and 71-73 refer to preferred embodiments of the activity board according to claims 1, 31, 43 and 46 and thus, these claims also fulfil the requirements of the PCT with regard to novelty.

Novelty (N) – second inventive concept, claim 70

Claim 70 meets the criteria set forth in PCT Article 33(2) for novelty. The prior art published before the priority date does not disclose an activity board assembly including a board; a base portion; a resilient support member; and characterised in that the board is rotatable with respect to the base portion about a first axis (orthogonal with upper surface of board); a second axis (orthogonal to the first axis and substantially parallel to upper surface of the board); a third axis (orthogonal to both the first and second axis); and wherein the board is also provided with a yaw-rate restrictor for restricting rotation about the first axis.

Inventive Step (IS) – first inventive concept, claims 1 to 69 and 71 to 73

Claims 1 to 69 and 71 to 73 meet the criteria set out in PCT Article 33(3) with regard to the requirement of Inventive Step because the prior art does not obviously suggest to a person skilled in the art an activity board with the features according to the broadest form of the invention as defined in claims 1, 31, 43 and 46. The appended claims embody further aspects of the inventive concept and therefore also meet the requirements of the PCT with regard to inventive step.

Inventive Step (IS) – second inventive concept, claim 70

Claim 70 meets the criteria set out in PCT Article 33(3) with regard to the requirement of Inventive Step because the prior art does not obviously suggest to a person skilled in the art a yaw-rate restrictor for restricting rotation about the first axis of an activity board.

Industrial Applicability (IA) – claims 1 to 73

The invention defined in claims 1 to 73 is considered to meet the requirements of Industrial Applicability under Article 33(4) PCT because it can be made by, or used in, industry.

## Supplemental Box II

If the space in any of the preceding boxes is not sufficient.

Continuation of: Box No. IV

PCT Rule 13.2, first sentence, states that unity of invention is only fulfilled when there is a technical relationship among the claimed inventions involving one or more of the same or corresponding special technical features. PCT Rule 13.2, second sentence, defines a special technical feature as a feature which makes a contribution over the prior art.

Each of the abovementioned groups of claims has a different distinguishing feature and they do not share any feature which could satisfy the requirement for being a special technical feature. Because there is no common special technical feature it follows that there is no technical relationship between the identified inventions. Therefore the claims do not satisfy the requirement of unity of invention *a priori*.